

What is claimed is:

[Claim 1] 1. A first circuit board connectable to a second circuit board, the first circuit board comprising:

at least one set of contacts, each set configured to receive an electrically conductive keypin for bridging a set of the contacts;

a detection circuit in signal communication with the at least one set of contacts, the detection circuit productive of a logic signal in response to a set of the contacts being bridged; and

a voltage generator responsive to the logic signal and productive of a voltage signal at a connector connectable to the second circuit board;

wherein the voltage signal at the connector has a first voltage value in response to the keypin being disposed at a first pin location, and a second different voltage value in response to the keypin being disposed at a second pin location, wherein at least one of the pin locations results in a set of the contacts being bridged.

[Claim 2] 2. The first circuit board of Claim 1, wherein:

in response to the keypin being disposed at the first pin location, a first input signal is provided to the detection circuit; and

in response to the keypin being disposed at the second pin location, a second different input signal is provided to the detection circuit.

[Claim 3] 3. The first circuit board of Claim 1, wherein the voltage generator comprises a switch.

[Claim 4] 4. The first circuit board of Claim 1, wherein:

the first voltage signal has a voltage level of about 3.3 volts; and

the second voltage signal has a voltage level of about 5.0 volts.

[Claim 5] 5. The first circuit board of Claim 1, wherein:

the voltage signal has the first voltage value in response to the keypin being disposed at only the first pin location; and

the voltage signal has the second voltage value in response to the keypin being disposed at only the second pin location.

[Claim 6] 6. The first circuit board of Claim 1, further comprising:

a reset circuit responsive to the voltage signal such that a reset signal is produced in the absence of the voltage signal having at least one of the first and the second voltage values.

[Claim 7] 7. The first circuit board of Claim 4, further comprising:

a control circuit responsive to the detection circuit for controlling the speed of communication between the first and the second circuit board in response to the keypin being disposed at the second pin location.

[Claim 8] 8. The first circuit board of Claim 6, further comprising:

a plurality of reset signal generators;

wherein the reset circuit is further responsive to a plurality of signals from the plurality of reset signal generators.

[Claim 9] 9. The first circuit board of Claim 8, wherein the plurality of reset signal generators comprises a master reset signal generator, an onboard reset signal generator, or any combination comprising at least one of the foregoing.

[Claim 10] 10. The first circuit board of Claim 1, wherein:

the first circuit board, having the keypin mechanically attached at the first pin location, mechanically rejects the second circuit board if the second circuit board is operable at a voltage signal having the second voltage value; and

the first circuit board, having the keypin mechanically attached at the second pin location, mechanically rejects the second circuit board if the second circuit board is operable at a voltage signal having the first voltage value.

[Claim 11] 11. The first circuit board of Claim 1, wherein:

the connector comprises a single conductor receptive of the voltage signal at the first and the second voltage values.

[Claim 12] 12. A method of providing a voltage signal from a first circuit board directed to a second circuit board in response to the attachment of a keypin to the first circuit board, the method comprising:

generating a first input signal in response to the keypin being attached to the first circuit board at a first location, and generating a second different input signal in response to the keypin being attached to the first circuit board at a second different location;

generating a first logic signal in response to the first input signal, and generating a second different logic signal in response to the second input signal; and

generating at a common output point a first voltage signal in response to the first logic signal and a second different voltage signal in response to the second logic signal.

[Claim 13] 13. The method of Claim 12, further comprising:

receiving a keypin at the first circuit board at a first location, a second location, or any combination comprising at least one of the foregoing locations.

[Claim 14] 14. The method of Claim 12, further comprising:

generating a reset signal in response to the absence of the keypin in at least one of the first location and the second location.

[Claim 15] 15. The method of Claim 12, wherein:

the first voltage signal has a voltage value of about 3.3 volts; and

the second voltage signal has a voltage value of about 5.0 volts.

[Claim 16] 16. The method of Claim 12, wherein:

the first voltage signal has a first voltage value in response to the keypin being attached only at the first location; and

the second voltage signal has a second voltage value in response to the keypin being attached only at the second location.

[Claim 17] 17. The method of Claim 12, further comprising:

controlling the speed of communication between the first circuit board and the second circuit board in response to the keypin being disposed at the second pin location.

[Claim 18] 18. The method of Claim 12, further comprising:

providing a mechanical rejection to prevent the attachment of the second circuit board to the first circuit board if the keypin is mechanically attached at the first location and the second circuit board is operable at the voltage of the second voltage signal; and

providing a mechanical rejection to prevent the attachment of the second circuit board to the first circuit board if the keypin is mechanically attached at the second location and the second circuit board is operable at the voltage of the first voltage signal.